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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/091,792 | 03/06/2002 | Louis P. Huber | P04870US1 | 9696 |

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DES MOINES, IA 50309-2721

EXAMINER

PHAN, THIEM D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| | 3729 |

DATE MAILED: 06/12/2003

A

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 10/091,792 | HUBER ET AL. |
| Examiner | Art Unit | |
| Tim Phan | 3729 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 March 2002 .

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 26-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 26-32 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. ____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . 6) Other: _____ .

DETAILED ACTION

Abstract

1. On page 17, above "ABSTRACT OF THE DISCLOSURE", -- Method for manufacturing a power chip resistor -- has been suggested to be inserted.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26, 29, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Wellard (US 4,267,634) hereinafter '634.

As applied to claims 26 and 31, the '634 teaches a method for making chip component, comprising:

- adhering a first chip or thick film resistor (Ch. Fig. 3, element 15) to second chip or thick film resistor (Ch. Fig. 3, element 15) with a glass or ceramic encapsulant (Cf. Fig. 3, element 13),

- connecting a first terminal of the first chip resistor to a first terminal of the second chip resistor with a first metal barrier (Cf. Fig. 7, element 27; column 4, lines 11-13),
- connecting a second terminal of the first chip resistor to a second terminal of the second chip resistor with a second metal barrier (Cf. Fig. 7, element 29; column 4, lines 11-13).

As applied to claim 29, the '634 teaches that the third chip resistor (Cf. Fig. 3, element 15) is adhered to the second chip resistor (Cf. Fig. 3, element 15) with a second glass or ceramic encapsulant (Cf. Fig. 3, element 13).

As applied to claim 32, the '634 teaches a method for making chip component, comprising:

- adhering a first chip resistor (Cf. Fig. 2, element 15) having a first substrate (Ch. Fig. 2, element 13) to second chip resistor (Cf. Fig. 2, element 15) having a second substrate (Cf. Fig. 2, element 17) with a glass or ceramic encapsulant (Cf. Fig. 2, element 17),
- connecting a first terminal of the first chip resistor to a first terminal of the second chip resistor with a first metal barrier (Cf. Fig. 7, element 27; column 4, lines 11-13),
- connecting a second terminal of the first chip resistor to a second terminal of the second chip resistor with a second metal barrier (Cf. Fig. 7, element 29; column 4, lines 11-13).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '634.

As applied to claims 27 and 28, the '634 teaches the claimed invention except for using nickel or nickel alloy as metal barrier. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use nickel or nickel alloy as metal barrier since it is known in the art that palladium-silver with similar melting temperature is used as metal barrier (Cf. column 3, lines 47-50).

As applied to claim 30, the '634 teaches the claimed invention except for using glass frit as encapsulant. It would have been an obvious matter of design choice to use glass frit as encapsulant, since applicants have not disclosed that using glass frit as encapsulant solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the encapsulant made of low dielectric constant material (Cf. column 2, lines

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37-41). Moreover, applicants indicate that the encapsulant can be of any inert materials other than glass frit (Cf. Specification , page 5, lines 5-8).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 703-605-0707. The examiner can normally be reached on M - F, 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

CJF

CARL J. ARBES
PRIMARY EXAMINER

TP
Tim Phan
Examiner
Art Unit 3729

tp
June 5, 2003